

Ardusa

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A GRAMMAR OF THE ARDUSAN LANGUAGES

by Ian A. Cook

last edited

August 17, 2019

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Ardusa is a fictional landmass set in a fictional constructed world. All of the languages spoken on Ardusa, such as Tavonic, Alnuric, Redodhic, and others, are themselves fictional, spoken by fictional groups of people, and as such are not related to any naturally existing languages. These languages' vocabularies are entirely *a priori*, which means that no words are derived from the vocabularies of real-world languages. That being said, these languages are intended to be naturalistic, so similarities will occur. Nonetheless, any actual duplication is accidental.



No website yet



<https://github.com/nai888/ardusa>



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Abbreviations

1p	first person plural	INF	infinitive
1pc	first person paucal	INT	interrogative
1s	first person singular	INTR	intransitive
2p	second person plural	IPFV	imperfective
2pc	second person paucal	MED	medial
2s	second person singular	NEG	negative
3p	third person plural	NMZ	nominalizer
3pc	third person paucal	NPST	nonpast
3s	third person singular	NRTRV	non-restrictive
ABS	absolutive	PASS	passive
ACC	accusative	PC	paucal
ACT	active	PFV	perfective
AN	animate	PL	plural
DAT	dative	PRG	progressive
DEM	demonstrative	PROX	proximate
DET	determiner	PST	past
DIM	diminutive	PTCP	participle
DIST	distal	Q	question particle
ERG	ergative	REL	relative
GEN	genitive	RTSP	retrospective
IMP	imperative	SBJV	subjunctive
IN	inanimate	SG	singular
IND	indicative	TOP	topic

- * ungrammatical
- ? grammatically questionable
- ! semantically odd or ill-formed

Acknowledgments

Given that I have not taken any official linguistics coursework, this work would not be possible without several sources of linguistic education. Mark Rosenfelder's *The Language Construction Kit* and *Advanced Language Construction Kit* were important to my first starting out in the world of language construction, with further knowledge gained from David J. Peterson's *The Art of Language Invention*. Of course, I received an unmeasurable amount of education via several online sources, especially the articles available on Wikipedia. Yet more education, as well as inspiration and motivation, have come from the *Conlangery* podcast and all its hosts and guests. Lexicon generation received guidance from Mark Rosenfelder's *The Conlanger's Lexipedia* and William S. Annis' *A Conlanger's Thesaurus*.

Finally, this document's format, layout, and organization have been influenced by several sources, particularly Thomas E. Payne's *Describing Morphosyntax*, Carsten Becker's *A Grammar of Ayeri*, and Matt Pearson's *The Okuna Reference Grammar*.

Preface

This document provides a detailed grammatical description of the languages of Ardusa, a fictional landmass set in a fictional constructed world. This project serves as a method for linguistic research, as an intellectual exercise, as an outlet for creative and artistic expression, and as a setting for potential future works of fiction. It is intended primarily for my own personal use and entertainment, though others with similar linguistic interests will hopefully find it interesting and entertaining as well. I have chosen to use \LaTeX to typeset this grammar because it provides a way to be clear, consistent, and organized. Further, since \LaTeX uses plain text files, it allows me to use Git for version control so I can keep track of changes over time.

My goal is to build a series of languages with naturalistic grammars that are linguistically plausible and consistent, yet also original in their content and details. This project consists of three distinct and unrelated language families, each of which contains one or more related languages. Some elements of these languages are influenced by existing languages such as Japanese, Finnish, Navajo, Nahuatl, and Arabic, but they are not meant to simply mimic these, instead drawing this inspiration into new forms along with entirely *a priori* lexicons. Ardusa and the Ardusan languages is an ongoing project with no fixed endpoint or goal.

This concise grammar is my attempt to document the Ardusan languages in an official and systematic way, and as comprehensively as possible. It is intended to be the official description of the languages. This is a concise grammar because, admittedly, I am not a professional linguist, nor have I taken any linguistics coursework. My education in linguistics consists solely of self-guided research, which means invariably my knowledge will be limited. It is a concise grammar because, frankly, I don't know enough to go into greater detail. That being said, I'm always eager to learn, and will always accept feedback. Again, learning is one of the reasons for this endeavor.

Since the purpose of writing this grammar is to provide a comprehensive description of the Ardusan languages, not to teach them to others, it is not intended to serve as a textbook or as a way to learn the languages. I have organized topics thematically, rather than curricularly, and I employ technical terms when they are precise, accurate, and appropriate. I have not conducted a formal analysis of the languages, but I have worked to make it as descriptive as possible.

The discussion is ordered from the smallest elements of the languages to the largest. It begins with a description of each language's place in Ardusa followed by their phonologies, it addresses morphology and the combining of words, it discusses vocabulary and derivation, and it explains syntax and discourse. The final chapter serves as a reference grammar, summarizing all of the previous chapters. There are

also several appendices describing the conceptual metaphors that organize much of the lexicons, the naming practices of the fictional speakers of these languages, several translation examples, and lexicons. Other resources include a glossary of linguistic glossing abbreviations, a bibliography, and an index.

This document uses several linguistics conventions to clarify meaning. Any reference to specific orthographic spelling is marked with angled brackets, such as ⟨hin⟩. Pronunciations are usually given phonemically, in which case they are marked with slashes, such as /hin/. Phonetic pronunciations are used only when conveying specific details like the difference between allophones, and are marked with square brackets, such as [çin]. Both phonemic and phonetic pronunciations are given using the International Phonetic Alphabet. Foreign words are always written in italics, such as *lu*. English glosses are surrounded by single quotes, such as ‘and’. If a morphological gloss is provided in-line, it is surrounded by parentheses, such as (INF).

Many short examples are provided in one single line.

- (1) Tavonic: *šek* /ʃek/ ‘ran’ (run-IND.PST.PFV)

Longer examples are usually provided with a multi-line, or interlinear, gloss. In these examples, the optional first line will indicate which language the example is in, if it is not clear from context. The next line presents the text in that language, followed by the pronunciation. After this, the text is broken into its component morphemes, and the following line provides a morpheme-by-morpheme gloss. The final line provides an English translation of the example phrase or sentence.

- (2) Tavonic

Nan oko šeđo.

/nan o'ko 'ʃe.ðo/

nan= oko š-eđo

PL.AN.TOP= dog run-IND.PST.PRG

‘The dogs were running.’

As shown in example 2, morpheme glosses are labeled with abbreviations in SMALL CAPS. A full list of all glossing abbreviations is given on page x. A hyphen marks a morpheme boundary within a word that is shared between the text and its gloss, while a period marks a boundary present in only one or the other, including when a single word in the text corresponds to multiple words in its gloss. Clitics are marked with an equals sign, reduplication with a tilde, discontinuous affixes (e.g., infixes, circumfixes) with angle brackets, and morphemes that cannot be easily separated out with backslashes.

The L^AT_EX source code for this grammar and a copy of this PDF are available in a public [GitHub](#) repository. Undoubtedly, there will be errors in this document. If you notice any, please feel free to open an issue in the GitHub repository with a description and the location of the error.

Ian A. Cook
Minneapolis, September 8, 2018

Part I

Tavonic Family: Tavonic

History and Ethnography

This chapter will present a brief history of the Tavonic language family, followed by a short description of its ethnolinguistic context.

1.1 Brief History

The Tavotath (the Tavonic people) migrated to Ardusa hundreds of years ago in what they termed Year 1 of the Ardusan Era (AE). Ardusa is far from any other landmasses and is isolated from the influence of other lands and other peoples. The Tavotath landed in the warm southeastern regions of Ardusa where they first established their new home, naming this new realm *Urdeso*, a compound word meaning ‘Safe Land’. Over the following centuries, the Tavotath spread westward and northward throughout the whole of Ardusa.

As the Tavotath spread, they formed several individual territories, each of which eventually developed into small kingdoms. These kingdoms constantly battled one another for power, and borders were continually shifting. Those who fled the fighting fled northward, furthering the Tavonic expansion throughout Ardusa. As the Tavotath spread farther apart and splintered, their language diverged. Two main dialects emerged, one in the north and one in the south.

After a few hundred years, one kingdom in the south emerged as dominant, conquering or allying with more and more kingdoms until, by 327 AE, the entire south of Ardusa was united under one empire. This empire enforced the usage of the language that had emerged in the south, thus forming the Alnuric language. The empire continued to push northward until it spread too thin and reached a stalemate with the allied kingdoms in the north around 371 AE. Finally, in 582 AE after a couple hundred years of relatively stable rule, the empire declined and divided again into individual territories, leaving behind six sovereign kingdoms.

While the empire was emerging in the south, the kingdoms in the north formed a loose alliance to resist its spread. The alliance managed to reach a stalemate with the empire, stopping its spread northward. The allied kingdoms together maintained the language that emerged in the north, thus forming the Redodhic language. Eventually, as the empire split in 582 AE and the northern alliance was no longer needed, the north also split into individual territories, leaving behind four sovereign kingdoms.

1.2 Ethnography

1.2.1 Demonyms and Language Names

The Tavotath were a tribe that migrated to Ardusa together, fleeing their previous home. The Tavonic word *tavo* /ta'vo/ means 'person', and so the derived word *Tavotap* /ta.vo'taθ/ means 'people' or 'tribe'. In other words, the Tavotath referred to themselves as the People, with *Tavonak* being the Language of the People. The Alnuric- and Redodhic-derived words, *Tevodep* /te.vo'deθ/ and *Tovujip* /to.vu'dʒiθ/ respectively, refer to all people who descended from the original Tavotath tribe. Both Alnuric and Redodhic are Tavotath languages and part of the Tavonic language family.

1.2.2 Ethnology

Here will be a brief ethnological description of the Tavotath.

1.2.3 Demography

Here will be a brief demographical description of the Tavotath.

Phonology

This chapter will present the inventory of consonants and vowels. An observational analysis of the Tavonic languages' syllable structures and phonotactics will follow. The chapter will close with notes on syllable stress within words and a brief exploration of intonation.

2.1 Phoneme Inventory

2.1.1 Consonants

With approximately 20 consonants, Tavonic has an “average” inventory.¹ Table 2.1 shows the full chart of consonant phonemes, along with several allophones enclosed in parentheses. Table 2.2 shows how each consonant in Tavonic is romanized.

Despite its “average” inventory of consonants, there are many more allophones that occur in the language. First, any doubled consonant is realized as a geminated (elongated) consonant.

- (1) *unner* /u'n:er/ ‘empire’

Thus, example 1 above is realized with a lengthened [n]. A doubled ⟨r⟩ is similarly geminated, but the pronunciation changes from a flap/tap to a trill.

The remaining allophones occur due to various sound change processes, mostly by assimilation. For example, /n/ becomes velarized when it appears immediately before a velar consonant.

- (2) *tavonga* [ta.voŋ'ga] ‘humanlike’

As discussed above, ⟨r⟩ can be pronounced as both a tap/flap [ɾ] and as a trill [r]. Additionally, when part of certain consonant clusters, it can be pronounced as an approximant [ɹ]. This primarily occurs when the ⟨r⟩ leads into a cluster or immediately follows a nasal.

- (3) *frorgali* [froɹ.'ga.li] ‘to un-see’

¹Ian Maddieson, “Consonant Inventories,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/1>.

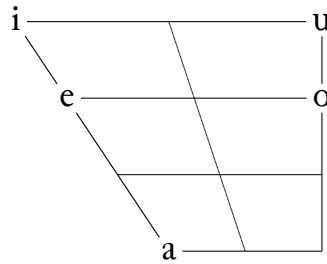
Table 2.1: Tavonic Phonetic Consonant Inventory (allophones in parentheses)

Consonants	Bilabial	Labio-dental	Dental	Alveolar	Post-alveolar	Velar
Nasal	m			n		(ŋ)
Plosive		p b	t d			k g
Fricative		f v	θ ð	s z	ʃ ʒ	x ɣ
Flap/Tap				r		
Trill				(r)		
Approximant				(ɹ)		
Lateral				l		

Table 2.2: Tavonic Consonant Romanization

Phone	Phoneme	Romanization	English	Notes
[m]	/m/	⟨m⟩	⟨m⟩	
[n]	/n/	⟨n⟩	⟨n⟩	
[ŋ]	/n/	⟨n⟩	⟨n⟩	/n/ becomes velarized before a velar consonant
[p]	/p/	⟨p⟩	⟨p⟩	
[b]	/b/	⟨b⟩	⟨b⟩	
[t]	/t/	⟨t⟩	⟨t⟩	
[d]	/d/	⟨d⟩	⟨d⟩	
[k]	/k/	⟨k⟩	⟨k⟩	
[g]	/g/	⟨g⟩	⟨g⟩	
[f]	/f/	⟨f⟩	⟨f⟩	
[v]	/v/	⟨v⟩	⟨v⟩	
[θ]	/θ/	⟨þ⟩	⟨th⟩	
[ð]	/ð/	⟨ð⟩	⟨dh⟩	
[s]	/s/	⟨s⟩	⟨s⟩	
[z]	/z/	⟨z⟩	⟨z⟩	
[ʃ]	/ʃ/	⟨š⟩	⟨sh⟩	
[ʒ]	/ʒ/	⟨ž⟩	⟨zh⟩	
[x]	/x/	⟨ḱ⟩	⟨kh⟩	
[ɣ]	/ɣ/	⟨ḡ⟩	⟨gh⟩	
[r]	/r/	⟨r⟩	⟨r⟩	
[r]	/r/	⟨rr⟩	⟨rr⟩	⟨r⟩ is trilled when doubled
[ɹ]	/r/	⟨r⟩	⟨r⟩	⟨r⟩ is occasionally pronounced as an approximant when a part of a consonant cluster
[l]	/l/	⟨l⟩	⟨l⟩	

Table 2.3: Tavonic Vowel Inventory



2.1.2 Vowels

Tavonic distinguishes five vowel qualities, as shown in Table 2.3, giving it an “average” inventory.² This means the consonant–vowel ratio is 20:5 or 4.0, which is “average”.³ Tavonic does not distinguish long and short vowels and does not allow any diphthongs.

Note that all Tavonic vowels have a very rigid acceptable pronunciation with very little variance.

- (4) a. *akrinsali* ‘to rewrite’ is pronounced /ak.rin'sa.li/. ⟨i⟩ is not pronounced with a lax [ɪ] in closed syllables (i.e., /ak.rɪn'sa.li/)
- b. *eðerik* ‘pencil’ is pronounced /e.ðe'rik/. ⟨e⟩ is not pronounced with an open [ɛ] in closed syllables or syllables with secondary stress or with a central [ə] in unaccented syllables (i.e., /ɛ.ðə'rik/), nor is it diphthongized to [eɪ] (i.e., /eɪ.ðe'rik/)
- c. *kalo* ‘man’ is pronounced /xa'lo/. ⟨a⟩ is not pronounced with a raised [æ] (i.e., /xæ'lo/), a backed [ɑ] (i.e., /xɑ'lo/), or a centralized [ɜ] (i.e., /xɜ'lo/)
- d. *esondi* ‘arable’ is pronounced /e.son'di/. ⟨o⟩ is not pronounced with an open [ɔ] (i.e., [e.sɔn'di]), nor is it diphthongized to [ou] (i.e., /e.sou'n'di/)
- e. *frumbali* ‘to misunderstand’ is pronounced /frum'ba.li/. ⟨u⟩ is not pronounced with an open [ʌ] (i.e., /frʌm'ba.li/) or a centralized [ʊ] (i.e., /frum'ba.li/)

2.2 Phonotactics

At the time of writing, there does not yet exist a sufficient corpus for a meaningful statistical analysis of Tavonic’s phonotactics. Therefore, this section will present only a cursory observational analysis.

2.2.1 Syllable Structures

Syllables in Tavonic must contain a vowel to serve as the syllable’s nucleus. Each syllable will only have at most one vowel. Syllables may also include any single consonant or one of a limited set of

²Ian Maddieson, “Vowel Quality Inventories,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/2>.

³Ian Maddieson, “Consonant–Vowel Ratio,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/3>.

two-consonant clusters as the onset, coda, or both.

In other words, the most complex syllable structure allowed in Tavonic is CCVCC, with restrictions on the allowable consonant clusters, giving Tavonic a “moderately complex syllable structure”.⁴

V

Since vowels are required to form a syllable nucleus, the most basic syllable structure is simply a vowel (V). Any syllable that starts with a vowel will occur exclusively at the beginning of a word.

- (5) a. *e* /e/ ‘in’ or ‘on’
 b. *eđer* /e’đer/ ‘pen’
 c. *abom* /a’bom/ ‘two’
 d. *oko* /o’ko/ ‘dog’
 e. *usukon* /u.su’kon/ ‘possessor’
 f. *ablu* /ab’lu/ ‘cat’

C

A syllable can contain a single-consonant onset or coda. There is no restriction on which consonants may appear in the onset or coda with just one consonant. CV is likely the most frequent type of syllable in Tavonic, with CVC probably being the second-most-frequent syllable type.

- (6) a. *ga* /ga/ ‘but’
 b. *lu* /lu/ ‘and’
 c. *mo* /mo/ ‘with’
 d. *ķalo* /xa’lo/ ‘man’
 e. *šeđo* /’je.đo/ (run.PST.IND.PRG) ‘was running’
 f. *urda* /ur’da/ ‘safe’
 g. *akradir* /ak.ra’dir/ ‘writing implement’
 h. *esonak* /e.so’nak/ ‘citizen’

Across two syllables within a word, there are restrictions on the combination of consonants that are possible. At such syllable boundaries, a plosive⁵ or a fricative⁶ can be followed by a liquid⁷; a liquid may be followed by a plosive, fricative, nasal⁸, or a different liquid; or a nasal can be followed by any other consonant.

⁴Ian Maddieson, “Syllable Structure,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/12>.

⁵i.e., ⟨p⟩, ⟨t⟩, ⟨k⟩, ⟨b⟩, ⟨d⟩, or ⟨g⟩

⁶i.e., ⟨f⟩, ⟨p⟩, ⟨s⟩, ⟨š⟩, ⟨ķ⟩, ⟨v⟩, ⟨ð⟩, ⟨z⟩, ⟨ž⟩, or ⟨ğ⟩

⁷i.e., ⟨l⟩ or ⟨r⟩

⁸i.e., ⟨m⟩ or ⟨n⟩

- (7) a. *elbi* /el'bi/ 'egg'
 b. *ongo* /on'go/ 'pan'
 c. *kalven* /xal'ven/ '400'
 d. *ablunga* /ab.lun'ga/ 'catlike'

CC

Syllables may contain onsets or codas with two consonants, but these shapes are less common and there are restrictions on the possible combinations. Syllable onsets with two consonants may only occur at the beginning of a word and may only contain a plosive or fricative followed by a liquid. Syllable codas with two consonants may only occur at the end of a word and may only contain a liquid followed by a plosive.

- (8) a. *pral* /pral/ 'some'
 b. *tlopendi* /tlo.θen'di/ 'permissible'
 c. *frandi* /fran'di/ 'visible'
 d. *šolk* /ʃolk/ 'yet'
 e. *delš* /delʃ/ 'zero'

2.2.2 Phonological Changes

Placeholder

2.2.3 Syllable Parsing

Placeholder

2.2.4 Number of Syllables per Word

Placeholder

2.3 Prosody

Placeholder

2.3.1 Syllable Weight

Placeholder

2.3.2 Word Stress

Placeholder

2.3.3 Intonation

Placeholder

Morphological Typology

Now that Tavonic, Alnuric, and Redodhic's phonologies have been defined in chapter 2, this chapter will discuss the next larger unit of language: morphemes. A morpheme is the smallest meaningful unit in a language. A morpheme can be a root, or it can be another element that affects or modifies the meaning of a root. Further, a morpheme may be freestanding, or it may be bound to other morphemes to form a larger word.

The discussion will begin with a general explanation of the Tavonic family's morphological typology. Following this will be a brief summary of the various morphological processes that occur in the languages, ending with an explanation of the locus of marking.

3.1 Morphological Typology

Traditional research would show that Tavonic is typologically partially isolating and partially fusional, meaning that morphemes are often either separated into distinct words or fused together such that a single phonological unit represents several morphemes. However, according to Bickel and Nichols,

Recent research has shown that such a scale [ranging from isolating to agglutinative to fusional to introflexive] conflates many different typological variables and incorrectly assumes that these parameters covary universally.¹ Three prominent variables involved in this are phonological fusion, formative exponence, and flexivity (i.e. allomorphy, inflectional classes).²

Therefore, we will examine each of these areas—phonological fusion, formative exponence, and flexivity, as well as the degree of synthesis—separately.

¹Frans Plank, "Split Morphology: how Agglutination and Flexion Mix," *Linguistic Typology* 3 (1999): 279–340; Balthasar Bickel and Johanna Nichols, "Inflectional Morphology," in *Language Typology and Syntactic Description*, ed. Timothy Shopen, 2nd edition (Cambridge: Cambridge University Press, 2005).

²Balthasar Bickel and Johanna Nichols, "Fusion of Selected Inflectional Formatives," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/20>.

3.1.1 Phonological Fusion

Tavonic's phonological formatives are partially fusional, being partially “isolating” and partially “concatenative”.³ The concatenative morphemes are phonologically bound, requiring a “host word” with which they form one single phonological word, while the isolating morphemes are “full-fledged phonological words of their own”.

Verbs are almost exclusively concatenative, with tense, aspect, and mood morphemes attached directly to the verb's stem.

- (1) a. *ufuli*
/u'fu.li/

uf-uli
sing-INF

'to sing'
- b. *Ufunte!*
/u'fun.te/

uf-unte
sing-IMP

'Sing!'
- c. *Mon ufuk.*
/'mon u'fuk/

mon uf-uk
IS.TOP sing-IND.PST.PFV

'I sang.'

Example 1 shows how morphemes are attached to the stem of a verb through suffixes, rather than with separate (isolating) modifying words or nonlinear ablaut or tone modifications.

Example 1c similarly shows how personal pronouns are fusional. Example 2 demonstrates further how each personal pronoun simultaneously indicates the person, number, animacy in the third person, case, and whether it is the topic.

- (2) a. *mor* /mor/ 'I' (IS.ABS)
b. *peton* /θe'ton/ 'you' (2p.ACC)
c. *ginsek* /gin'sek/ 'to it' (3pc.IN.TOP.DAT)

This concatenation appears not only in inflectional morphology, but also in derivational morphology. For example, the word *ablutik* /a.blu'tik/ 'kitten' is formed from the root noun *ablu* /a'blu/ 'cat' with a diminutive suffix attached (*ablu*-DIM). Similarly, the word *akradir* /ak.ra'dir/ 'pen' is formed from the root verb *akrali* /ak'ra.li/ 'to write' with a nominalizing suffix (*akra*-NMZ).

³Bickel and Nichols, “Fusion of Selected Inflectional Formatives.”

Nouns, on the other hand, are exclusively isolating. All grammatical markings, including number, gender, case, and topicality, are indicated using phonologically separate prepositions.

- (3) a. *No akrakon arup.*
/no ak.ra'kon a'ruθ/

no= akrakon ar-up
AN.SG.TOP.ABS= writer stand-IND.NPST.PRG

‘The writer is standing.’

- b. *Eson mopēs elbi šus ken botra draš.*
/e'son mo,θes el'bi 'jus ken bot'ra 'draš/

Ø= *eson mopēs= elbi šus ken= botra dr-aš*
AN.SG.ABS= farmer IN.PC.TOP.ACC= egg 3S.AN.GEN AN.PL.DAT= wife give-IND.NPST.RTSP

‘The farmer has given the eggs to his wife.’

Notice in example 3 how every noun is preceded by a preposition that identifies that noun’s grammatical role within the sentence.

3.1.2 Formative Exponence

Tavonic has mostly polyexponential formatives, meaning that, in almost all cases, single morphemes express multiple grammatical categories each.⁴ Derivational morphemes are all monoexponential while inflectional morphemes are almost exclusively polyexponential.

- (4) *Nan tavotik one vi?*
/nan ta.vo'tik o'ne vi/

nan= tavo-tik on-e =vi
AN.PL.TOP= person-DIM play-IND.NPST.IPFV =Q

‘Do children play?’

Example 4 includes one derivational morpheme and three inflectional morphemes attached to the roots *tavo* and *oneli*, two of which are polyexponential. The preposition *nan* is a polyexponential morpheme that identifies the preceding noun’s gender (animate), number (plural), and topicality. The affix *-tik*, a diminutive that derives the word ‘child’ from the root ‘person’, is a monoexponential derivational suffix. The single-letter suffix *-e* attaches to the verb to express the mood (indicative), tense (nonpast), and aspect (imperfective). Finally, the word *vi* is a monoexponential interrogative clitic that turns the sentence into a question.

Noun prepositions can additionally encode case. In example 4, the noun *tavotik* is inferred to be in the absolutive case despite being unmarked for it. In many other situations, this grammatical case

⁴Balthasar Bickel and Johanna Nichols, “Exponence of Selected Inflectional Formatives,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/21>.

is additionally encoded within the same polyexponential preposition. In example 3b, the word *mopes* indicates that the noun ‘egg’ is inanimate, paucal, the topic, and in the accusative case.

One noun preposition, *nut* has not fully cumulated, with the noun’s number being still separated into a distinct segment.

- (5) a. *nut-Ø* /nut/ (AN.TOP.ACC-SG)
 b. *nut-os* /nu'tos/ (AN.TOP.ACC-PC)
 c. *nut-on* /nu'ton/ (AN.TOP.ACC-PL)

All other noun prepositions are fully cumulated and cannot be separated into their component morphemes.

- (6) a. Inanimate Ergative
 i. *ða* /ða/ (IN.SG.ERG)
 ii. *ðes* /ðes/ (IN.PC.ERG)
 iii. *dun* /dun/ (IN.PL.ERG)
 b. Inanimate Topic Dative
 i. *moĥ* /moχ/ (IN.SG.TOP.DAT)
 ii. *mekos* /me'kos/ (IN.PC.TOP.DAT)
 iii. *nikun* /ni 'kun/ (IN.PL.TOP.DAT)

3.1.3 Flexivity

Tavonic nouns, adjectives, and verbs display flexivity, which means that these words are divided into separate classes that receive distinct inflectional allomorphs. On such allomorphs, otherwise identical morphemes take distinct phonological shapes.

Nouns are divided into animate and inanimate genders. These two genders determine which prepositions are used to provide the grammatical context of the noun.

- (7) a. *ri bilt*
 /ri 'bilt/

ri= *bilt*
 AN.PC.ABS= breath

 ‘breaths’
 b. *l'eðer*
 /le'ðer/

le=eðer
 IN.PC.ABS=pen

 ‘pens’

In example 7, both *bilt* and *eðer* are marked for the paucal number and the absolutive case, but because *bilt* is animate and *eðer* is inanimate, the shape of the prepositions are entirely different.

Although they are distinct, the shapes are often more closely related than in example 7. Example 8 shows the animate and inanimate forms of the plural ergative preposition; the relation between the two forms is much clearer, as only the vowel changes.

- (8) a. *din bilt*
 /din 'bilt/

din= bilt
 AN.PL.ERG= breath

 'breaths'
- b. *dun eðer*
 /dun e'ðer/

dun= eðer
 IN.PL.ERG= pen

 'pens'

Nouns do not show possessive flexivity, as there is no possessive classification.⁵ There is only one method of forming a possessive relationship: using the genitive case.

Adjectives also show flexivity since they decline to match the gender of the noun they modify. Each adjective has a distinct animate and inanimate form, with animate adjectives ending in *-a*, *-i*, or *-u* and inanimate adjectives ending in *-e* or *-o*.

- (9) a. *su frandi bilt*
 /su fran'di 'bilt/

su= frandi bilt
 AN.SG.GEN= visible.AN breath

 'of the visible breath'
- b. *šo frando eðer*
 /šo fran'do e'ðer/

šo= frando eðer
 IN.SG.GEN= visible.IN pen

 'of the visible pen'

In example 9, the form of *frandi* changes depending on whether it is modifying an animate noun like *bilt* or an inanimate noun like *eðer*.

⁵Johanna Nichols and Balthasar Bickel, "Possessive Classification," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/59>.

Verbs are divided into three distinct conjugation classes, each identified by the infinitive form. Class I verb infinitives end in *-ali*, class II verb infinitives end in *-eli*, and class III verb infinitives end in *-uli*.

- (10) a. Class I: *bruṣat-ali* /bru.θa'ta.li/ 'to handle' (handle-INF)
 b. Class II: *š-eli* /'ʃe.li/ 'to run' (run-INF)
 c. Class III: *teg-uli* /te'gu.li/ 'to worry' (worry-INF)

Beyond just the form of the infinitive, the verb's class determines the entire conjugation paradigm for that verb.

- (11) a. Class I: *bruṣat-abe* /bru.θa'ta.be/ 'handling' (handle-ACT.PTCP)
 b. Class II: *š-iba* /'ʃi.ba/ 'running' (run-ACT.PTCP)
 c. Class III: *teg-ube* /te'gu.be/ 'worrying' (worry-ACT.PTCP)

As shown in example 11, the same inflection takes a different form when attached to a verb of a different class. To form the active participle, *bruṣatali* becomes *bruṣatabe* and *teguli* becomes *tegube*. Following this pattern, one might expect *šeli* to become **šebe*, but instead it becomes *šiba*.

3.1.4 Synthesis

As discussed in subsection 3.1.1, derivation and verb inflection occurs by attaching affixes to a stem or root, forming singular phonological words. Meanwhile, noun declension occurs using prepositions that mark the grammatical information for the noun. These prepositions are separate phonological words from the nouns themselves.

In all cases, however, inflected forms constitute singular *syntactic* words because the inflections cannot be separated or reordered at all. This means that Tavonic morphology is synthetic.⁶

Tavonic verbs normally inflect to show mood, tense, and aspect, a total of three morpheme categories per word. The maximally inflected form adds negation, a particle that is a separate phonological word but remains a part of the syntactic word of the verb, bringing Tavonic's category-per-word ratio up to 4.⁷

- (12) *Šun onek bo.*
 /'ʃun o'nek bo/
 šun on-ek -bo
 3S.AN.TOP play-IND.PST.PFV -NEG
 'S/he did not play.'

⁶Balthasar Bickel and Johanna Nichols, "Inflectional Synthesis of the Verb," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/22>.

⁷Ibid.

3.2 Morphological Processes

Tavonic is “predominantly suffixing”⁸ and primarily makes use of suffixes and clitics to derive and inflect words. The language does not employ infixation, stem modification, or suprafixation, no prefixation has yet been identified, and reduplication only appears in wordplay and child-directed speech.

3.2.1 Suffixation

Suffixes in Tavonic apply mainly to verbs. All verbal inflections occur via the addition of suffixes, whether phonologically bound or not. This is illustrated in example 13.

- (13) a. *Šona git akrağ.*
 /ʃo'na git ak'ray/
šona git akr-ağ
 3p.AN.TOP 3s.IN.ACC write-IND.PST.RTSP
 ‘They had written it.’
- b. *Monsa ufut oþ nikis.*
 /mon'sa u'fut oθ ni'kis/
monsa uf-ut oþ nik-is
 1pc.TOP sing-IND.NPST.PFV if be.able-SBJV.NPST.IPFV
 ‘We will sing if we are able.’
- c. *usombe akrapis*
 /u'som.be ak.ra'pis/
us-ombe akrapis
 hold-PASS.PTCP.IN letter
 ‘held letter’
- d. *Mi þro akrorganta.*
 /mi 'θro ak.ror'gan.ta/
mi þro akrorg-anta
 IN.SG.TOP that.MED erase-IMP
 ‘Erase that.’

⁸Matthew S. Dryer, “Prefixing vs. Suffixing in Inflectional Morphology,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/26>.

- e. *Mana kantenta bo.*
 /ma'na kan'ten.ta bo/
mana kant-enta -bo
 IP.TOP thank-IMP -NEG
 'Don't thank us.'

As discussed in subsection 3.1.4, although the particle *bo* is a separate phonological word, it functions syntactically as a suffix. This is shown in example 13e where it attaches to the verb *kantenta* to negate it.

Suffixes are also present on adjectives, though only minimally. Adjectives take one of two vowel endings to mark the gender of its referent, with animate adjectives ending in *-i*, *-a*, or *u* and inanimate adjectives ending in *-e* or *-o*.

- (14) a. *ablunga* /ab.lun'ga/ (AN) vs. *ablunge* /ab.lun'ge/ (IN) 'catlike'
 b. *akrandi* /ak.ran'di/ (AN) vs. *akrando* /ak.ran'do/ (IN) 'writable'
 c. *brupatla* /bru.θat'la/ (AN) vs. *brupatlo* /bru.θat'lo/ (IN) 'manual'
 d. *fraḡru* /fraθ'ru/ (AN) vs. *fraḡro* /fraθ'ro/ (IN) 'observant'

Suffixation also occurs regularly in derivational inflection. In fact, several derivational suffixes can be strung together to derive yet more words. Example 15 shows this process.

- (15) a. *frali* /'fra.li/ 'to see'
 b. *fravem* /fra'vem/ 'sight'
 c. *fravemitla -o* /fra.vem.it'la/ 'visual'
 d. *onaš* /o'naʃ/ 'rug'
 e. *onašuli* /o.na'ʃu.li/ 'to place'
 f. *onašinsuli* /o.na.ʃin'su.li/ 'to re-place'

In example 15f, the *-ins* affix may not immediately appear to be a suffix, however it should be noted that it is being attached to the end of the *stem* of the word, which is *onaš-*, prior to the verb's infinitive ending *-uli*, which is an *inflectional* suffix.

3.2.2 Cliticization

Clitics can be difficult to define in a formal way, and it is therefore worthwhile to explain how certain morphemes in Tavonic can be classified as such.

A 'clitic' is often characterized as "a 'small', prosodically weak, or non-prominent word which fails to respect normal principles of syntactic distribution because it requires a host to which it can attach phonologically".⁹ Clitics are different from affixes in that they will typically "cliticize 'promiscuously'

⁹Andrew Spencer and Ana Luís, "The Canonical Clitic," chap. 6 in *Canonical Morphology and Syntax*, by Dunstan Brown, Marina Chumakina, and Greville G. Corbett (2012), 123–150, ISBN: 9780199604326, accessed November 25, 2018,

to a word of any old category, including uninflectable words which otherwise fail to take any affixes whatever”,¹⁰ whereas affixes are limited to only specific parts of speech to which they can connect.¹¹ Yet, they are different from function words in that they are bound, that is they do not have the free ordering afforded to words.¹²

The primary example of clitics in Tavonic is the noun prepositions. These particles cannot appear alone, conveying solely grammatical, not lexical, information. They are not affixes because they attach to the beginning of the entire noun phrase, no matter what word comes after, rather than attaching directly to the head noun.

- (16) a. *Mod nas oko fra.*
 /'mod nas o'ko 'fra/
 mod nas= oko fr-a
 IS.ERG AN.PC.TOP dog see-IND.NPST.IPFV
 'I see the dogs.'
- b. *Mod nas urda oko fra.*
 /'mod nas ur'da o'ko 'fra/
 mod nas= urd-a oko fr-a
 IS.ERG AN.PC.TOP protected-AN dog see-IND.NPST.IPFV
 'I see the protected dogs.'
- c. *Mod nas tesar urda oko fra.*
 /'mod nas te'sar ur'da o'ko 'fra/
 mod nas= tesar urd-a oko fr-a
 IS.ERG AN.PC.TOP 2pc.GEN protected-AN dog see-IND.NPST.IPFV
 'I see your protected dogs.'
- d. *Mod nas su eson urda oko fra.*
 /'mod nas su e'son ur'da o'ko 'fra/
 mod nas= su= eson urd-a oko fr-a
 IS.ERG AN.PC.TOP AN.SG.GEN farmer protected-AN dog see-IND.NPST.IPFV
 'I see the farmer's protected dogs.'

Notice in example 16 how the particle *nas* directly precedes the entire noun phrase, even when separated from the head noun by an adjective (16b), a pronoun (16c), and even another modifying noun and its preposition (16d).

doi:10.1093/acprof:oso/9780199604326.001.0001, https://www.academia.edu/4379177/The_canonical_clitic_With_Ana_Lu%C3%ADs_.

¹⁰Ibid.

¹¹Arnold M. Zwicky and Geoffrey K. Pullum, "Cliticization vs. Inflection: English N'T," *Language* 59, no. 3 (1983): 503–505, accessed November 25, 2018, <https://web.stanford.edu/~zwicky/ZPCliticsInfl.pdf>.

¹²Arnold M. Zwicky, "Clitics and Particles," *Language* 61, no. 2 (1985): 286–290, accessed November 25, 2018, <http://babel.ucsc.edu/~hank/mrg.readings/zwicky1985.pdf>.

In some cases, the noun prepositions reduce phonologically and attach to the following word. Any time a noun preposition ends with the same vowel with which the following word begins, that vowel is dropped and the preposition is attached orthographically to the following word with an apostrophe.

- (17) a. *le eđer* → *l'eđer* /le'đer/ 'pens' (IN.PC.ABS-pen)
 b. *mati inam* → *mat'inam* /ma.ti'nam/ 'location' (IN.SG.TOP.ACC-location)
 c. *no oko* → *n'oko* /no'ko/ 'dog' (AN.SG.TOP-pen)
 d. *su urda ablu* → *s'urda ablu* /sur'da ab'lu/ 'of the protected cat' (AN.SG.GEN-protected-AN cat)

This phonological reduction occurs no matter whether the following word is the noun the preposition is modifying or not. For example, notice in example 17d that the preposition attaches itself to *urda* even though it is an adjective modifying the noun *ablu*.

The other main example of cliticization is the particle *vi*. It is used to ask questions and is most often added at the end of a sentence after the verb, as shown in example 18.

- (18) *No šekon tu fraþru oko usu vi?*
 /no je'kon tu fraθ'ru o'ko u'su vi/
 no= šekon tu= fraþr-u oko us-u =vi
 AN.SG.TOP= runner AN.SG.ACC= observant-AN dog have-IND.NPST.IPFV =Q
 'Does the runner have an observant dog?'

A speaker can, however, move the interrogative particle earlier in the sentence to focus the question on some specific element.

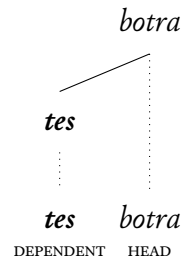
- (19) a. *No šekon vi tu fraþru oko usu?*
 /no je'kon vi tu fraθ'ru o'ko u'su/
 no= šekon =vi tu= fraþr-u oko us-u
 AN.SG.TOP= runner =Q AN.SG.ACC= observant-AN dog have-IND.NPST.IPFV
 'Is it the runner who has an observant dog?'
 b. *No šekon tu fraþru vi oko usu?*
 /no je'kon tu fraθ'ru vi o'ko u'su/
 no= šekon tu= fraþr-u =vi oko us-u
 AN.SG.TOP= runner AN.SG.ACC= observant-AN =Q dog have-IND.NPST.IPFV
 'Is it an *observant* dog the runner has?'
 c. *No šekon tu fraþru oko vi usu?*
 /no je'kon tu fraθ'ru o'ko vi u'su/
 no= šekon tu= fraþr-u oko =vi us-u
 AN.SG.TOP= runner AN.SG.ACC= observant-AN dog =Q have-IND.NPST.IPFV
 'Is it an observant *dog* the runner has?'

3.3 Locus of Marking

Tavonic is almost exclusively dependent-marking.¹³ This can readily be seen in the expression of possessive relationships, where the dependent is marked with the genitive case.

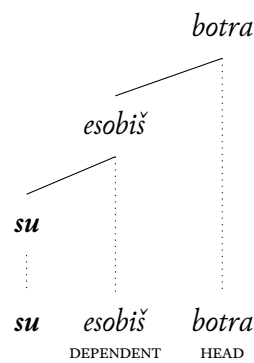
- (20) a. *tes botra*
/ˈtes botˈra/

tes *botra*
2S.GEN wife
‘your wife’



- b. *su esobiš botra*
/su e.soˈbiʃ botˈra/

su= *esobiš* *botra*
AN.SG.GEN= patriot wife
‘the patriot’s wife’

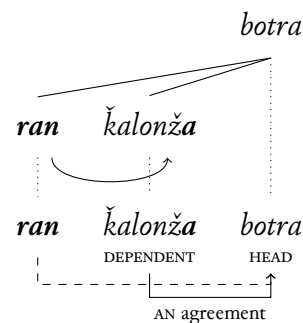


In example 20a, ‘you’ are grammatically in possession of *botra* ‘wife’; the possessee forms the head of the phrase while it is modified by the possessor, which receives the genitive inflection. In example 20b, *botra* is still the possessee and thus the head of the phrase while the genitive is marked on the dependent, *esobiš* ‘patriot’, using a noun preposition.

Tavonic also shows dependent marking when modifying nouns with adjectives.

- (21) *ran ħalonža botra*
/ran xa.lonˈʒa botˈra/

ran= *ħalonž-a* *botra*
AN.PL.ABS= husbandless-AN woman
‘husbandless women’

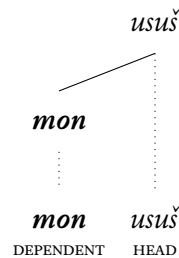


In example 21, while the head noun *botra* is marked for animacy with *ran*, the dependent modifying adjective *ħalonža* ‘husbandless’ takes the *-a* animate ending to match.

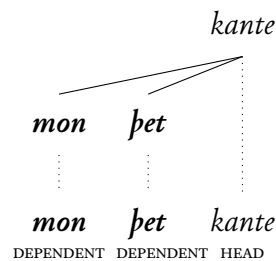
¹³Johanna Nichols and Balthasar Bickel, “Locus of Marking: Whole-language Typology,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/25>.

At the clause level, Tavonic is solely dependent-marking. Verbs have no grammatical inflections that indicate the grammatical role of any noun phrases within the clause, with that information being marked only on the verb's dependents, the noun phrases.

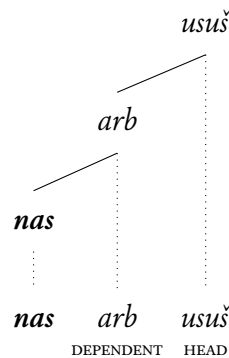
- (22) a. *Mon usuš.*
/ˈmon uˈsuʃ/
mon us-uš
IS.TOP sing-IND.NPST.RTSP
‘I have sung.’



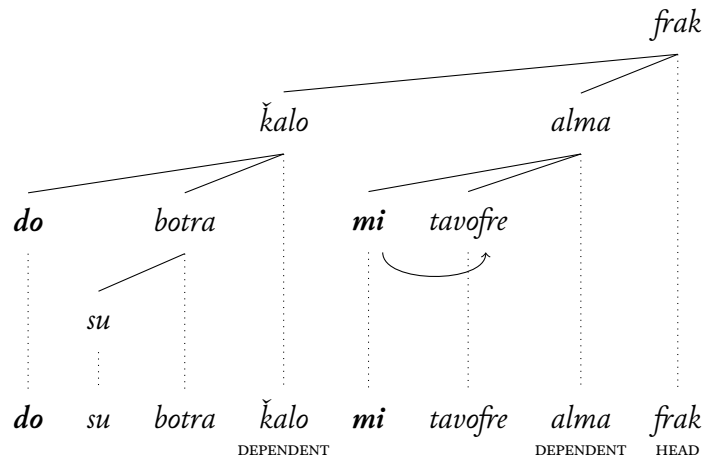
- b. *Mon þet kante.*
/ˈmon ˈθet kanˈte/
mon þet kant-e
IS.TOP 2S.ACC thank-IND.NPST.IMP
‘I thank you.’



- c. *Nas arb usuš.*
/nas ˈarb uˈsuʃ/
nas= arb us-uš
AN.PC.TOP= bird sing-IND.NPST.RTSP
‘The birds have sung.’



- d. *Do su botra ĵalo mi tavofre alma frak.*
/do su botˈra xaˈlo mi ta.vof re alˈma ˈfrak/
do= su= botra ĵalo mi= tavofr-e alma fr-ak
AN.SG.ERG= AN.SG.GEN= woman husband IN.SG.TOP= inhabited-IN house see-IND.PST.PFV
‘The woman’s husband saw the inhabited house.’



In example 22a, the pronoun *mon* is declined to indicate it is the topic of the sentence while the verb *usuŝ*, despite conjugating for mood, tense, and aspect, is not marked for this role. Example 22b similarly marks the two pronouns *mon* and *pet* for their roles in the sentence as topic and object while the verb *kante* does not inflect to indicate these roles. When nouns are used instead of pronouns, as in examples 22c–d, the nouns are marked for their grammatical role by their prepositions, their own dependents, while the head verb remains unmarked for these roles.

Grammatical Categories

Tavonic words can be divided into several different categories, or parts of speech. While the previous chapter dealt with the general mechanisms of marking words, this chapter will examine each of the various parts of speech in order to define their morphology more closely. The discussion will begin with an examination of nouns, pronouns, and verbs. Following this will be a discussion of the remaining parts of speech, including adverbs, numerals, and conjunctions.

4.1 Nouns

Nouns in Tavonic decline to express number and gender (animacy) and are marked for case to indicate their grammatical role within the clause. As discussed in chapter 3, this inflection takes place not directly on the noun itself but on prepositional clitics that convey this grammatical meaning.¹ For a full illustration of the declension paradigms, compare Table 4.1 and Table 4.2. As shown in these tables, Tavonic noun inflections are never syncretic.²

4.1.1 Gender

Grammatical gender in Tavonic consists of two³ non-sex-based⁴ classes based primarily on semantic ontological properties.⁵ The animate gender refers primarily to entities that are considered alive or

¹Matthew S. Dryer, “Position of Case Affixes,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <https://wals.info/chapter/51>.

²Matthew Baerman and Dunstan Brown, “Case Syncretism,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/28>.

³Greville G. Corbett, “Number of Genders,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <http://wals.info/chapter/30>.

⁴Greville G. Corbett, “Sex-based and Non-sex-based Gender Systems,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <https://wals.info/chapter/31>.

⁵Greville G. Corbett, “Systems of Gender Assignment,” in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <https://wals.info/>

Table 4.1: Tavonic Animate Noun Declension Paradigm for the word *bruþa* ‘hand’ or ‘tool’

Case	SG	PC	PL
ABS	<i>bruþa</i>	<i>ri bruþa</i>	<i>ran bruþa</i>
ERG	<i>do bruþa</i>	<i>das bruþa</i>	<i>din bruþa</i>
ACC	<i>tu bruþa</i>	<i>tos bruþa</i>	<i>ton bruþa</i>
DAT	<i>ke bruþa</i>	<i>kas bruþa</i>	<i>ken bruþa</i>
GEN	<i>su bruþa</i>	<i>sar bruþa</i>	<i>san bruþa</i>
TOP	<i>no bruþa</i>	<i>nas bruþa</i>	<i>nan bruþa</i>
TOP.ACC	<i>nut bruþa</i>	<i>nutos bruþa</i>	<i>nuton bruþa</i>
TOP.DAT	<i>nek bruþa</i>	<i>nekas bruþa</i>	<i>naken bruþa</i>
TOP.GEN	<i>nus bruþa</i>	<i>nosar bruþa</i>	<i>nosan bruþa</i>

Table 4.2: Tavonic Inanimate Noun Declension Paradigm for the word *šem* ‘busyness’

Case	SG	PC	PL
ABS	<i>šem</i>	<i>le šem</i>	<i>ren šem</i>
ERG	<i>ða šem</i>	<i>ðes šem</i>	<i>dun šem</i>
ACC	<i>ti šem</i>	<i>þis šem</i>	<i>ten šem</i>
DAT	<i>ķo šem</i>	<i>kos šem</i>	<i>ķun šem</i>
GEN	<i>šo šem</i>	<i>se šem</i>	<i>šen šem</i>
TOP	<i>mi šem</i>	<i>mes šem</i>	<i>nun šem</i>
TOP.ACC	<i>mati šem</i>	<i>mopes šem</i>	<i>noten šem</i>
TOP.DAT	<i>mok šem</i>	<i>mekos šem</i>	<i>nikun šem</i>
TOP.GEN	<i>miš šem</i>	<i>mise šem</i>	<i>nušen šem</i>

are associated with life, movement, change, or dynamism. The inanimate gender refers primarily to entities that are not alive and are generally stationary or abstract. Grammatical gender in Tavonic can also be referred to as “animacy” since that is what the genders denote. Examples of nouns in each gender can be seen in example 1.

- (1) a. Animate nouns:
botra ‘woman’, *ķalo* ‘man’, *eson* ‘farmer’, *okotik* ‘puppy’, *urdatil* ‘ward’, *bilt* ‘breath’
- b. Inanimate nouns:
esotik ‘country’, *dedu* ‘sky’, *elbi* ‘egg’, *usudir* ‘basket’, *akrapis* ‘letter’, *fradir* ‘glasses’

Since the nouns themselves are not directly inflected, with grammatical information instead shown on prepositional particles, it is impossible to tell what gender a noun is based solely on its word form.

Some nouns are able to change category in certain circumstances. For example, plants and animals switch from the animate gender to the inanimate gender when they serve as food. Further, there exist some duplicates with otherwise identical words declining to opposite genders.

4.1.2 Number

Grammatical number in Tavonic consists of three numbers, all of which are coded on the noun prepositions.⁶ The singular is always used when there is only one of the referent noun, the paucal is used when there are two to five of the referent noun, and the plural is used when there are more than five of the referent noun.

- (2) a. *su ima* /su i'ma/ 'of mother' (SG.AN.GEN= mother)
b. *sar ima* /sar i'ma/ 'of (some) mothers' (PC.AN.GEN= mother)
c. *san ima* /san i'ma/ 'of (several) mothers' (PL.AN.GEN= mother)

When a numeral is used to identify the number of a referent noun, the singular is used instead of the paucal or plural, even if without the numeral the other forms would be used.⁷

- (3) a. *k'ep ima* /keθ i'ma/ 'to one mother' (SG.AN.DAT=one mother)
b. *ke arsi ima* /ke ar'si i'ma/ 'to three mothers' (SG.AN.DAT= three mother), not **kas arsi ima*
c. *ke bruð abom ima* /ke bruð a'bom i'ma/ 'to seven mothers' (SG.AN.DAT= five two mother), not **ken bruð abom ima*

Most nouns that represent concrete entities are countable, including some words that in English are uncountable like corn, and by default they are used in the singular form unlike English words like pants or glasses. However, many entities that are not easily split into discreet parts like liquids, grains, and certain abstract concepts are uncountable, such as *elto* /el'to/ 'water'. Occasionally, when a word's semantics cover multiple concepts, a word can be variably countable or uncountable; when *dedu* /de'du/ is used to mean 'sky' or 'heaven', it is uncountable, but when it is used to mean 'ceiling', it is countable and can be made paucal or plural.

People's names can also be declined to the paucal or plural number to indicate the associative plural.⁸ This form is used to refer to a person and the other people associated with that person. For example, *ri Bol* /ri bol/ (PC.AN.ABS Bol) refers to Bol and two to five other people associated with him. Similarly, *ran Ote* /ran o'te/ (PL.AN.ABS Ote) refers to Ote and the group he is with.

4.1.3 Case

As shown in Tables 4.1 and 4.2, Tavonic noun phrases decline to five different grammatical cases⁹ in order to show their role in the sentence. These cases are governed by the phrase's verb or assigned

⁶Matthew S. Dryer, "Coding of Nominal Plurality," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <https://wals.info/chapter/33>.

⁷Martin Haspelmath, "Occurrence of Nominal Plurality," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <https://wals.info/chapter/34>.

⁸Michael Daniel and Edith Moravcsik, "The Associative Plural," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <https://wals.info/chapter/36>.

⁹Oliver A. Iggesen, "Number of Cases," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <https://wals.info/chapter/49>.

to adjuncts depending on their purpose or meaning. As shown in the same declension tables, any of these grammatical cases can be replaced by or combined with topic markers. See subsection 4.1.4 for more information on topicality.

Absolutive and Intransitive

The intransitive case marks a noun or noun phrase that serves as the subject of an intransitive verb like *šeli* ‘to run’ or a transitive verb used intransitively like *ufuli* ‘to sing’ (without naming the object, what is being sung). This means that when a verb has only a single argument, that argument will by default be in the intransitive case. That is true whether the subject is serving like an agent as in words like *šeli* ‘to run’ or *ufuli* ‘to sing’ or when the subject is serving more like a patient as in words like *orðali* ‘to fall’.

- (4) a. *Mollur šep.*
 /mo'l:ur 'ʃeθ/
 Ø= *Mollur š-ep*
 AN.SG.INTR= Mollur run-IND.NPST.PRG
 ‘Mollur is running.’
- b. *R'ima ufu.*
 /ri'ma u'fu/
ri=ima uf-u
 AN.PC.INTR=mother sing-IND.NPST.IPFV
 ‘The mothers sing.’
- c. *Ren fild orðak.*
 /ren 'fild or'ðak/
ren= fild orð-ak
 IN.PL.INTR= doll fall-IND.PST.PFV
 ‘The dolls fell.’

Note that the singular intransitive case is entirely unmarked by any preposition. This is true whether the noun is animate or inanimate.

- (5) a. *Alum uldeteš.*
 /a'lum ul.de'teʃ/
 Ø= *alum uldet-eš*
 AN.SG.INTR= cloud change-IND.NPST.RTSP
 ‘The cloud has changed.’

- b. *Almaþ uldeteš.*
 /al'maθ ul.de'teʃ/
 Ø= *almaþ uldet-eš*
 IN.SG.INTR= village change-IND.NPST.RTSP
 'The village has changed.'

However, the subject of certain transitive verbs will also take the intransitive case if the semantic meaning of the verb is stative. See section 4.1.3 Dative for more information on this. Since it is used in these situations, and since the intransitive is the citation form, the case is normally referred to as the absolutive case, even when used intransitively. These terms are interchangeable.

- (6) *Ter ke arb fra vi?*
 /ter ke arb 'fra vi/
ter ke= arb fr-a =vi
 2S.ABS AN.SG.DAT= bird see-IND.NPST.IPFV =Q
 'Do you see a bird?'

The absolutive case is frequently used with postpositions to indicate a location where or through which an action is taken, for example being placed at, on, or in something.

- (7) a. *Ablu onaš e onek.*
 /ab'lu o'naʃ e o'nek/
 Ø= *ablu* Ø= *onaš e on-ek*
 AN.SG.ABS= cat IN.SG.ABS= rug on play-IND.PST.PFV
 'The cat played on the rug.'
- b. *Mod ti ennis l'elbi arku ġirak.*
 /mod ti e'n:is lel'bi ar'ku ġi'rak/
mod ti= ennis le=elbi arku ġir-ak
 IS.ERG IN.SG.ACC= ball IN.PC.ABS=egg above throw-IND.PST.PFV
 'I threw the ball over the eggs.'

When an action is done 'with' or 'without' a noun, the absolutive case will be used.

- (8) *Oko ablu mo oneþ.*
 /o'ko ab'lu mo o'neθ/
 Ø= *oko* Ø= *ablu mo on-eþ*
 AN.SG.ABS= dog AN.SG.ABS= cat with play-IND.NPST.PRG
 'The dog is playing with the cat.'

The absolutive case is also used when directly addressing someone in a vocative function. The noun functioning in this way is often placed at the beginning or end of the sentence separated by a pause in speech or a comma in writing.

- (9) a. *Lerk, šebanta.*
 /'lerk, ʃe'ban.ta/
 Ø= *Lerk šeb-anta*
 AN.SG.ABS= Lerk run-IMP
 'Run, Lerk.'
- b. *Sud tu tavotik urdatep, Erme.*
 /sud tu ta.vo'tik ur.da'teθ er'me/
 sud tu= tavotik urdat-eþ Ø= Erme
 3S.AN.ERG AN.SG.ACC= child guard-IND.NPST.PRG AN.SG.ABS= Erme
 'He is guarding the child, Erme.'

Ergative

The ergative case marks a noun or noun phrase that serves as the subject of an active transitive verb or any ditransitive verb. This means that when a verb has multiple arguments and the semantic meaning of the verb is active, the subject argument will by default be in the ergative case.

- (10) a. *Do Tlunda ti akrapis eðeraš.*
 /do tlun'da ti ak.ra'pis e.ðe'raʃ/
 do= Tlunda ti= akrapis eðer-aš
 AN.SG.ERG= Tlunda IN.SG.ACC= letter pen-IND.NPST.RTSP
 'Tlunda has penned a letter.'
- b. *Das oko tu ablu okotam.*
 /das o'ko tu ab'lu o.ko'tam/
 das= oko tu= ablu okot-am
 AN.PC.ERG= dog AN.SG.ACC= cat chase-IND.PST.IPFV
 'The dogs chased the cat.'
- c. *Din avo ten usudir visağ.*
 /din a'vo ten u.su'dir vi'saɣ/
 din= avo ten= usudir vis-ağ
 AN.PL.ERG= father IN.PL.ACC= basket take.away-IND.PST.RTSP
 'The father and his associates had taken away the baskets.'

Accusative

The accusative case marks a noun or noun phrase that serves as the direct object of an active transitive verb or any ditransitive verb.

- (11) a. *Do akrakon þis eðerik alma e onašuk.*

/do ak.ra'kon θis e.ðe'rik al'ma e o.na'fuk/

do= akrakon þis= eðerik alma e onaš-uk
AN.SG.ERG= writer IN.PC.ACC= pencil house in place-IND.PST.PFV

‘The writer placed the pencils in the house.’

- b. *Do šus botra ti šus akrapis uldetuk.*

/do fus bot'ra ti fus ak.ra'pis ul.de'tuk/

do= šus botra ti= šus akrapis uldet-uk
AN.SG.ERG= 3p.AN.GEN wife IN.SG.ACC= 3p.AN.GEN letter change-IND.PST.PFV

‘His wife changed his letter.’

Dative

The dative case marks a noun or noun phrase that serves as the indirect object of a ditransitive verb, a recipient of an action, or the entity for whose benefit or detriment the action is taken.

- (12) *Do eson ti ennis ke oko draš.*

/do e'son ti e'n:is ke o'ko 'draš/

do= eson ti= ennis ke= oko dr-aš
AN.SG.ERG= farmer IN.SG.ACC= ball AN.SG.DAT= dog give-IND.NPST.RTSP

‘The farmer has given the dog a ball.’

Certain monotransitive verbs are used with the absolutive and dative cases instead of the ergative and accusative cases. These tend to be stative verbs in which the object of the verb is unaffected by the action or there is little volition on the part of the subject.

- (13) a. *Mor tek tegu.*

/mor tek te'gu/

mor tek teg-u
1S.ABS 2S.DAT worry-IND.NPST.IPFV

‘I worry for you.’

- b. *Ran urdaton ken ufukon keđam.*
 /ran ur.da'ton ken u.fu'kon ke'đam/
 ran= urdaton ken= ufukon keđ-am
 AN.PL.ABS= guard AN.PL.DAT= singer admire-IND.PST.IPFV
 'The guards admired the singers.'

When a verb is done on behalf of or for someone or something, the beneficiary of that action will be declined to the dative and followed by the postposition *li* /li/ 'for'.

- (14) a. *Sur kas šus botrašut li ove.*
 /sur kas fus bot.ra'fut li o've/
 sur kas= šus botrašut li ov-e
 3S.AN.ABS AN.PC.DAT= 3S.AN.GEN fiancée for cook-IND.NPST.IPFV
 'He cooks for his fiancée and her friends.'
- b. *Do Blimva tu okotik ke šus avo li urdatep.*
 /do blim'va tu o.ko'tik ke fus a'vo li ur.da'teθ/
 do= Blimva tu= okotik ke= šus avo li
 AN.SG.ERG= Blimva AN.SG.ACC= puppy AN.SG.DAT= 3S.AN.GEN father for
 urdat-eþ
 protect-IND.NPST.PRG
 'Blimva is protecting the puppy for her father.'

The dative case can also be used in an allative sense to express movement to or toward.

- (15) *Mor ģo alma bi šeba.*
 /mor xo al'ma bi še'ba/
 mor ģo= alma to šeb-a
 1S.AN IN.SG.DAT= house to run-IND.NPST.IPFV
 'I run to the house.'

This can result in subtle changes in meaning when used with ditransitive verbs.

- (16) a. *Mod þis ennis tek ģira.*
 /mod θis e'n:is tek ģi'ra/
 mod þis= ennis tek ģir-a
 1S.ERG IN.PC.ACC= ball 2S.DAT throw-IND.NPST.IPFV
 'I throw the balls to you.'

- b. *Mod þis ennis tek bi ġira.*
 /mod θis e'n:is tek bi ɣi'ra/
 mod þis= ennis tek bi ġir-a
 IS.ERG IN.PC.ACC= ball 2S.DAT at throw-IND.NPST.IPFV
 'I throw the balls at you.'

Notice in example 16a that *tek* is the recipient of the action while in example 16b *tek* is the target of the action.

Genitive

The genitive case is used to mark the possessor of a noun or noun phrase.

- (17) *Su Goltu botra mok fra.*
 /su gol'tu bot'ra mok 'fra/
 Ø= su= Goltu botra mok fr-a
 AN.SG.ABS= AN.SG.GEN= Goltu wife IS.DAT see-IND.NPST.IPFV
 'Goltu's wife sees me.'

Just like other attributives, the genitive phrase will occur between the possessee and its declension clitic.

- (18) a. *Do su Zarsa oko tu mos ablu okotaða!*
 /do su zar'sa o'ko tu mos ab'lu o.ko'ta.ða/
 do= su= Zarsa oko tu= mos ablu okot-aða
 AN.SG.ERG= AN.SG.GEN= Zarsa dog AN.SG.ACC= IS.GEN cat chase-IND.PST.PRG
 'Zarsa's dog was chasing my cat!'
- b. *Mod ti ennis ke su Inki oko ġira.*
 /mod ti e'n:is ke su in'ki o'ko ɣi'ra/
 mod þis= ennis ke= su= Inki oko ġir-a
 IS.ERG IN.SG.ACC= ball AN.SG.DAT= AN.SG.GEN= Inki dog throw-IND.NPST.IPFV
 'I throw the ball to Inki's dog.'

When a verb is done because of or due to someone or something, the cause of that action will be declined to the genitive and followed by the postposition *li* /li/ 'because of'.

- (19) a. *Sur su šus botrašut li puzađa bas ovek.*
 /sur su fus bot.ra'fut li pu'za.đa bas o'vek/
 sur su= šus botrašut li puza-đa bas
 3S.AN.ABS AN.SG.GEN= 3S.AN.GEN fiancée because.of cry-IND.PST.PRG REL.NRTRV
 ov-ek
 cook-IND.PST.PFV
 ‘He cooked because his fiancée was crying.’
- b. *Do Blimva tu okotik su šus avo li urdatep.*
 /do blim'va tu o.ko'tik su fus a'vo li ur.da'teθ/
 do= Blimva tu= okotik su= šus avo li
 AN.SG.ERG= Blimva AN.SG.ACC= puppy AN.SG.GEN= 3S.AN.GEN father because.of
 urdat-ep
 protect-IND.NPST.PRG
 ‘Blimva is protecting the puppy from her father.’

The genitive can also be used in an ablative sense to express movement from or away.

- (20) *Mor šo alma gu šeba.*
 /mor fo al'ma gu je'ba/
 mor šo= alma to šeb-a
 IS.AN IN.SG.GEN= house from run-IND.NPST.IPFV
 ‘I run from the house.’

4.1.4 Topicality

Several noun cases have variants that mark a noun as the topic of a discourse. The topic is the entity most closely associated with the higher-level theme of the paragraph.

The case preposition that encodes *only* topicality completely replaces the case marking for a noun that is in the absolutive or the ergative.

- (21) a. *No Mollur šep.*
 /no mo'l:ur 'jeθ/
 no= Mollur š-ep
 AN.SG.TOP= Mollur run-IND.NPST.PRG
 ‘Mollur is running.’

- b. *ʃan ke arb fra vi?*
/θan ke arb 'fra vi/

ʃan ke= arb fr-a =vi
2S.TOP AN.SG.DAT= bird see-IND.NPST.IPFV =Q

‘Do you see a bird?’

- c. *Nas oko tu ablu okotam.*
/nas o'ko tu ab'lu o.ko'tam/

nas= oko tu= ablu okot-am
AN.PC.TOP= dog AN.SG.ACC= cat chase-IND.PST.IPFV

‘The dogs chased the cat.’

This case preposition also completely replaces the accusative and dative cases, but only in certain situations when the intended case is inferable. In other words, it replaces the accusative case only when the ergative is present within the sentence, it replaces the dative in a monotransitive sentence only when the absolutive case is present, and it replaces the dative in a ditransitive sentence only when both the ergative and the accusative are present.

- (22) a. *Do šus botra mi šus akrapis uldetuk.*
/do ʃus bot'ra mi ʃus ak.ra'pis ul.de'tuk/

do= šus botra mi= šus akrapis uldet-uk
AN.SG.ERG= 3p.AN.GEN wife IN.SG.TOP= 3p.AN.GEN letter change-IND.PST.PFV

‘His wife changed his letter.’

- b. *Ran urdaton nan ufukon keḏam.*
/ran ur.da'ton nan u.fu'kon ke'ḏam/

ran= urdaton nan= ufukon keḏ-am
AN.PL.ABS= guard AN.PL.TOP= singer admire-IND.PST.IPFV

‘The guards admired the singers.’

- c. *Do eson ti ennis no oko draš.*
/do e'son ti e'n:is no o'ko 'draʃ/

do= eson ti= ennis no= oko dr-aš
AN.SG.ERG= farmer IN.SG.ACC= ball AN.SG.TOP= dog give-IND.NPST.RTSP

‘The farmer has given the dog a ball.’

For other situations, there exist combined forms to mark a noun as the topic when it is in the accusative, dative, or genitive case.

- (23) a. *Nut ablu okotam.*
 /nut ab'lu o.ko'tam/
nut= ablu okot-am
 AN.SG.ACC.TOP= cat chase-IND.PST.IPFV
 'The cats were chased.'
- b. *Naken ufukon keđam.*
 /na'ken u.fu'kon ke'đam/
naken= ufukon keđ-am
 AN.PL.DAT.TOP= singer admire-IND.PST.IPFV
 'The singers were admired.'
- c. *Mod ti ennis ke þansu oko ġira.*
 /mod ti e'n:is ke θan'su o'ko ɣi'ra/
mod þis= ennis ke= þansu oko ġir-a
 IS.ERG IN.SG.ACC= ball AN.SG.DAT= 2S.GEN.TOP dog throw-IND.NPST.IPFV
 'I throw the ball to your dog.'

See section 7.1 for a greater explanation of how the topic is used within discourse.

4.2 Pronouns and Determiners

Tavonic has several types of pronouns and determiners that serve as anaphora, including personal pronouns, demonstrative pronouns, interrogative pronouns, relative pronouns, and other indefinite pronouns.

4.2.1 Personal Pronouns

As shown in Table 4.3, Tavonic contains several personal pronouns. These pronouns are symmetrical to other nouns and noun phrases,¹⁰ declining to show gender, number, case, and topicality just like nouns while adding person.

Historically, all pronouns were regular formations with the case-marking preposition and a person-marking pronoun, but over time, these words combined and fused as grammaticalization progressed. The forms are now completely fused.

¹⁰Oliver A. Iggesen, "Asymmetrical Case-Marking," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), <https://wals.info/chapter/50>.

Table 4.3: Tavonic Personal Pronouns

Person	ABS	ERG	ACC	DAT	GEN	TOP	TOP.ACC	TOP.DAT	TOP.GEN
1S	<i>mor</i>	<i>mod</i>	<i>mot</i>	<i>mok</i>	<i>mos</i>	<i>mon</i>	<i>montu</i>	<i>monke</i>	<i>monsu</i>
1PC	<i>morsa</i>	<i>modas</i>	<i>motos</i>	<i>mokas</i>	<i>mosar</i>	<i>monsa</i>	<i>monsut</i>	<i>monsek</i>	<i>monsus</i>
1P	<i>morna</i>	<i>modin</i>	<i>moton</i>	<i>moken</i>	<i>mosan</i>	<i>mana</i>	<i>manut</i>	<i>manek</i>	<i>manus</i>
2S	<i>ter</i>	<i>ted</i>	<i>ɸet</i>	<i>tek</i>	<i>tes</i>	<i>ɸan</i>	<i>ɸantu</i>	<i>ɸanke</i>	<i>ɸansu</i>
2PC	<i>tersa</i>	<i>tedas</i>	<i>ɸetos</i>	<i>tekas</i>	<i>tesar</i>	<i>tensa</i>	<i>tensut</i>	<i>tensek</i>	<i>tensus</i>
2P	<i>terna</i>	<i>tedin</i>	<i>ɸeton</i>	<i>token</i>	<i>tesan</i>	<i>tana</i>	<i>tanut</i>	<i>tanek</i>	<i>tanus</i>
3S.AN	<i>sur</i>	<i>sud</i>	<i>sut</i>	<i>suk</i>	<i>šus</i>	<i>šun</i>	<i>šuntu</i>	<i>šunke</i>	<i>šunsu</i>
3PC.AN	<i>suša</i>	<i>sudas</i>	<i>sutos</i>	<i>sukas</i>	<i>šusar</i>	<i>sunas</i>	<i>šunsut</i>	<i>šunsek</i>	<i>šunsus</i>
3P.AN	<i>surna</i>	<i>sudin</i>	<i>suton</i>	<i>suken</i>	<i>šusan</i>	<i>šona</i>	<i>šonut</i>	<i>šonek</i>	<i>šonus</i>
3S.IN	<i>gir</i>	<i>gid</i>	<i>git</i>	<i>gake</i>	<i>gis</i>	<i>gin</i>	<i>gintu</i>	<i>ginke</i>	<i>ginsu</i>
3PC.IN	<i>girsa</i>	<i>gidas</i>	<i>gitos</i>	<i>gokas</i>	<i>gisar</i>	<i>ginsa</i>	<i>ginsut</i>	<i>ginsek</i>	<i>ginsus</i>
3P.IN	<i>girna</i>	<i>gidun</i>	<i>giton</i>	<i>goken</i>	<i>gisan</i>	<i>gana</i>	<i>ganut</i>	<i>ganek</i>	<i>ganus</i>

- (24) a. *Do Tlunda ti ennis ke su Lerk oko ġirak.*
 /do tlun'da ti e'n:is ke su 'lerk o'ko ɣi'rak/

do= Tlunda ti= ennis ke= su= Lerk oko
 AN.SG.ERG= Tlunda IN.SG.ACC= ball AN.SG.DAT= AN.SG.GEN= Lerk dog
 ġir-ak
 throw-IND.PST.PFV

‘Tlunda threw the ball to Lerk’s dog.’

- b. *Sud ti ennis ke su Lerk oko ġirak.*
 /'sud ti e'n:is ke su 'lerk o'ko ɣi'rak/

Sud ti= ennis ke= su= Lerk oko ġir-ak
 3S.AN.ERG IN.SG.ACC= ball AN.SG.DAT= AN.SG.GEN= Lerk dog throw-IND.PST.PFV

‘She threw the ball to Lerk’s dog.’

- c. *Do Tlunda git ke su Lerk oko ġirak.*
 /do tlun'da 'git ke su 'lerk o'ko ɣi'rak/

do= Tlunda git ke= su= Lerk oko ġir-ak
 AN.SG.ERG= Tlunda 3S.IN.ACC AN.SG.DAT= AN.SG.GEN= Lerk dog throw-IND.PST.PFV

‘Tlunda threw it to Lerk’s dog.’

- d. *Do Tlunda ti ennis ke šus oko ġirak.*
 /do tlun'da ti e'n:is ke 'fus o'ko ɣi'rak/
 do= Tlunda ti= ennis ke= šus oko ġir-ak
 AN.SG.ERG= Tlunda IN.SG.ACC= ball AN.SG.DAT= 3S.AN.GEN dog throw-IND.PST.PFV
 ‘Tlunda threw the ball to his dog.’
- e. *Do Tlunda ti ennis suk ġirak.*
 /do tlun'da ti e'n:is 'suk ɣi'rak/
 do= Tlunda ti= ennis suk ġir-ak
 AN.SG.ERG= Tlunda IN.SG.ACC= ball AN.SG.DAT= AN.SG.GEN=
 ‘Tlunda threw the ball to him.’

Personal pronouns are used the same way their full noun phrase counterparts are, in both core and non-core cases, and replace the full noun phrase for which they are serving as anaphor. Example 24a shows a full sentence without any pronouns; examples 24b–e then show variations on this sentence with different noun phrases replaced with pronouns. Notice that the pronoun replaces the full noun phrase, for example in 24d where *šus* replaces only *su Lerk*, the noun in the genitive, whereas in 24e, *suk* replaces *ke su Lerk oko*, the full dative noun phrase. Similarly, when a noun phrase contains an adjective, the whole noun phrase is replaced, including the adjective, as in example 25.

- (25) a. *Bol no fraḡru botra kanteġ.*
 /'bol no fraθ'ru bot'ra kan'tek/
 Ø= Bol no= fraḡru botra kant-ek
 AN.SG.ABS= Bol AN.SG.TOP= observant woman thank-IND.PST.IPFV
 ‘Bol thanked the observant woman.’
- b. **Bol fraḡru šun kanteġ.*
 /'bol fraθ'ru 'fun kan'tek/
 Ø= Bol fraḡru šun kant-ek
 AN.SG.ABS= Bol observant 3S.AN.TOP thank-IND.PST.IPFV
 *‘Bol thanked the observant her.’
- c. *Bol šun kanteġ.*
 /'bol 'fun kan'tek/
 Ø= Bol šun kant-ek
 AN.SG.ABS= Bol 3S.AN.TOP thank-IND.PST.IPFV
 ‘Bol thanked her.’

4.2.2 Demonstrative Pronouns and Determiners

There exist three demonstratives in Tavonic, including *ðle* /ðle/ ‘this’ (proximal), *pro* /θro/ ‘that’ (medial), and *lerko* /ler'xo/ ‘that’ (distal). Just like the personal pronouns, these demonstratives replace the whole noun phrase for which they serve as anaphor. However, unlike pronouns, they do not have fused declensional forms; instead, they decline the same way nouns do.

- (26) a. *Mor kō ðle usu.*
/'mor xo ðle u'su/

mor *kō*= *ðle* *us-u*
IS.AN.ABS IN.SG.DAT= DEM.PROX have-IND.NPST.IPFV
‘I have this.’

- b. *Mor kō pro usu.*
/'mor xo θro u'su/

mor *kō*= *pro* *us-u*
IS.AN.ABS IN.SG.DAT= DEM.MED have-IND.NPST.IPFV
‘I have that.’

- c. *Mor kō lerko usu.*
/'mor xo ler'xo u'su/

mor *kō*= *lerko* *us-u*
IS.AN.ABS IN.SG.DAT= DEM.DIST have-IND.NPST.IPFV
‘I have that.’

The proximal demonstrative *ðle* refers to an object close to the speaker. The medial demonstrative *pro* refers to an object close to the addressee. The distal demonstrative *lerko* refers to an object far from both the speaker and the addressee.

The demonstrative pronouns also inflect to show number, just like nouns. Example 27a shows the proximal demonstrative *ðle* used in the paucal number, while 27b shows the same in the plural.

- (27) a. *Mor kos ðle usu.*
/'mor xo ðle u'su/

mor *kō*= *ðle* *us-u*
IS.AN.ABS IN.PC.DAT= DEM.PROX have-IND.NPST.IPFV
‘I have these.’

- b. *Mor ĵun ðle usu.*
/ˈmor xo ðle uˈsu/

mor *ĵo=* *ðle* *us-u*
IS.AN.ABS IN.PL.DAT= DEM.PROX have-IND.NPST.IPFV

‘I have these.’

The demonstratives can also be used as determiners by pairing them with a noun. These determiners lack flexivity and do not inflect to match the gender of the referent noun like adjectives do. Determiners are placed *after* the noun they modify.

- (28) a. *D’oko nas ablu ðle okotak.*
/doˈko nas abˈlu ðle o.koˈtak/

do=oko *nas=* *ablu ðle* *okot-ak*
AN.SG.ERG=dog AN.PC.TOP= cat DEM.DET.PROX chase-IND.PST.PFV

‘The dog chased these cats.’

- b. *D’oko no ablu þro okotak.*
/doˈko no abˈlu θro o.koˈtak/

do=oko *no=* *ablu þro* *okot-ak*
AN.SG.ERG=dog AN.SG.TOP= cat DEM.DET.MED chase-IND.PST.PFV

‘The dog chased that cat.’

- c. *D’oko nan ablu lerĵo okotak.*
/doˈko nan abˈlu lerˈxo o.koˈtak/

do=oko *nan=* *ablu lerĵo* *okot-ak*
AN.SG.ERG=dog AN.PL.TOP= cat DEM.DET.DIST chase-IND.PST.PFV

‘The dog chased those cats.’

4.2.3 Interrogative Pronouns and Determiners

Tavonic contains only one interrogative, *arke* /arˈke/. By default, *arke* means ‘who’ or ‘what’, depending on how it is declined.

- (29) a. *Ter ĵo arke frak?*
/ˈter xo arˈke ˈfrak/

ter *ĵo=* *arke fr-ak*
2S.ABS IN.SG.DAT= INT see-IND.PST.PFV

‘What did you see?’

- b. *Arke gin frak?*
 /ar'ke gin 'frak/
 Ø= *arke gin fr-ak*
 SG.ABS= INT 3S.IN.TOP see-IND.PST.PFV
 'Who saw it?'

As shown in example 29a, the interrogative pronoun is placed *in situ*. In other words, the question word stays in place rather than being fronted to the beginning of the sentence like in English.

Notice also in example 29 that the particle *vi* is not used. Any sentence that contains the interrogative *arke* can be seen to be a question, obviating the need for *vi*. However, *vi* can be added back in to emphasize or, conceivably in rare instances, clarify the question.

Arke can be paired with certain nouns or postpositions to form other interrogatives such as 'where', 'when', and 'how'.

- (30) a. *Ter gin inam arke e frak?*
 /'ter gin i'nam ar'ke e 'frak/
ter gin inam arke e fr-ak
 2S.ABS 3S.IN.TOP place INT at see-IND.PST.PFV
 'Where did you see it?'
- b. *Ter gin etri arke e frak?*
 /'ter gin et'ri ar'ke e 'frak/
ter gin etri arke e fr-ak
 2S.ABS 3S.IN.TOP time INT at see-IND.PST.PFV
 'When did you see it?'
- c. *Ter gin arke mo frak?*
 /'ter gin ar'ke mo 'frak/
ter gin arke mo fr-ak
 2S.ABS 3S.IN.TOP INT with see-IND.PST.PFV
 'How (with what) did you see it?'
- d. *Ter gin pul arke frak?*
 /'ter gin pul ar'ke 'frak/
ter gin pul arke fr-ak
 2S.ABS 3S.IN.TOP way INT see-IND.PST.PFV
 'How (what way) did you see it?'

Arke can also be paired with other nouns as a determiner to narrow the scope of the question, as in example 31.

- (31) *Ter ke oko arke frak?*
/'ter ke o'ko ar'ke 'frak/
ter ke= oko arke fr-ak
2S.ABS AN.SG.DAT= dog INT see-IND.PST.PFV
'What dog did you see?'

4.2.4 Relative Pronouns

Relative pronouns

4.2.5 Indefinite Pronouns and Determiners

Indefinite pronouns and determiners

4.3 Adjectives

Adjectives

4.4 Adpositions

Adpositions

4.5 Verbs

Verbs

4.6 Adverbs

Adverbs

4.7 Numerals

Numerals

4.8 Quantifiers and Intensifiers

Quantifiers and Intensifiers

4.9 Conjunctions

Conjunctions

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How do words go together?

Lexical Operations

6.1 Compounding

How does compounding work?

6.2 Derivation

How do you make new words?

Discourse

How does conversation work?

7.1 Topic

Sociolinguistic Context

8.1 Conceptual Metaphors

What metaphors do the vocabulary convey?

For example: language is a tool. I speak *with* or *using* Tavonic, rather than just speaking Tavonic.

8.2 Kinship Terms

This section needs to be overhauled.

The Tavonic kinship system is large descriptive, with only a few classificatory terms. Siblings are distinguished from cousins, and parallel cousins are distinguished from cross cousins. Siblings and parallel cousins are identified by gender, while cross cousins are not. Parallel aunts and uncles are distinguished from cross aunts and uncles. Grandparents are identified by gender, but are otherwise undistinguished. Children and grandchildren are similarly identified by gender but otherwise undistinguished. See Figure 8.1 for a full kinship tree.

All of the kinship terms within a nuclear family have distinct names distinguishing gender and generation.

mother	<i>júói</i>
father	<i>uutói</i>
sister	<i>náatói</i>
brother	<i>toóbói</i>
wife	<i>ólói</i>
husband	<i>udói</i>
daughter	<i>lárroi</i>
son	<i>zohíói</i>

Relation by marriage is expressed with a prefix *wen-*. This prefix can be added to several terms, such as ‘sister’, ‘brother’, ‘daughter’, and ‘son’.

mother-in-law	<i>wenjúói</i>
father-in-law	<i>wenuutói</i>
sister-in-law	<i>wennáatói</i>
brother-in-law	<i>wentoóbói</i>
daughter-in-law	<i>wenlárrói</i>
son-in-law	<i>wenzohíói</i>

Terms for one's nieces and nephews are derived from a combination of the terms for 'sister' or 'brother' and the terms for 'daughter' or 'son'.

niece	<i>náalár</i>	sister's daughter
niece	<i>toólár</i>	brother's daughter
niece-in-law	<i>wennáalár</i>	sister's daughter-in-law
niece-in-law	<i>wentoólár</i>	brother's daughter-in-law
nephew	<i>náazo</i>	sister's son
nephew	<i>toózo</i>	brother's son
nephew-in-law	<i>wennáazo</i>	sister's son-in-law
nephew-in-law	<i>wentoózo</i>	brother's son-in-law
niefling	<i>tírtrabói</i>	gender-neutral term for niece or nephew

One's grandchildren are distinguished by gender, but not by their parents. In other words, one's daughter's daughter is called the same term as one's son's daughter. As discussed in ??, these terms are derived using reduplication.

granddaughter	<i>lálárrói</i>
grandson	<i>zozohíói</i>

The children of one's nieces and nephews are all called *tírtrabói*, regardless of their gender. This term is identical to the gender-neutral term for one's nieces and nephews.

Tavonic distinguishes between parallel and cross aunts and uncles. In other words, one's mother's sister is called differently than one's father's sister. In fact, the term for cross aunts is identical to the term for parallel aunt-in-laws, and the term for cross uncles is identical to the term for parallel uncle-in-laws. Similar to the terms for grandchildren, the terms for parallel aunts and uncles are derived using reduplication.

aunt	<i>nánáatói</i>	mother's sister
aunt	<i>náugámói</i>	father's sister
aunt	<i>náugámói</i>	aunt by marriage
uncle	<i>totoóbói</i>	father's brother
uncle	<i>tougámói</i>	mother's brother
uncle	<i>tougámói</i>	uncle by marriage

Tavonic distinguishes between parallel and cross cousins, but does not distinguish them by gender. Within parallel cousins, different terms are used to distinguish maternal vs. paternal cousins. Cousins' spouses are treated the same as in-laws by adding the *wen-* prefix.

cousin	<i>tírnánáatói</i>	mother's sister's child
cousin-in-law	<i>wentírnánáatói</i>	mother's sister's child's spouse
cousin	<i>tírtotoóbói</i>	father's brother's child
cousin-in-law	<i>wentírtotoóbói</i>	father's brother's child's spouse
cousin	<i>tratrabói</i>	cross cousin
cousin-in-law	<i>wentratrabói</i>	cross cousin's spouse

The children and grandchildren of one's cousins are not distinguished in any way, even between parallel and cross cousins. In fact, they are all called by the same term as one's cross cousins, *tratrabói*.

Grandparents are distinguished by gender, but there is no distinction made between maternal and paternal grandparents. Similar to the terms for grandchildren, the terms for grandparents are derived using reduplication.

grandmother	<i>jújúói</i>
grandfather	<i>utuutói</i>

One's grandparents' siblings are called by the same terms as for one's aunts and uncles. In other words, one would call one's maternal grandmother's brother the same term as one's mother would call that person.

grand-aunt	<i>nánáatói</i>	grandmother's sister
grand-aunt	<i>náugámói</i>	grandfather's sister
grand-aunt	<i>náugámói</i>	grandparent's sister-in-law
grand-uncle	<i>totoóbói</i>	grandfather's brother
grand-uncle	<i>tougámói</i>	grandmother's brother
grand-uncle	<i>tougámói</i>	grandparent's brother-in-law

8.3 Names

8.3.1 Masculine Names

Bol /'bol/
 Lerk /'lerk/
 Mollur /mo'l:ur/
 Ote /o'te/

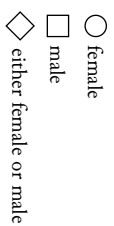
8.3.2 Feminine Names

Blimva /blim'va/
 Goltu /gol'tu/
 Tlunda /tlun'da/
 Zarsa /zar'sa/

8.3.3 Gender-Neutral Names

Erme /er'me/

Inki /in'ki/

[illegible]

Tavonic Reference Grammar

Here is a reference grammar for Tavonic.

Part II

Tavonic Family: Alnuric

History and Ethnography

This chapter will present a brief history of the Alnuric language, followed by a short description of its ethnolinguistic context.

10.1 Brief History

Here will be a brief historical description of the Alnureth.

10.2 Ethnography

10.2.1 Demonyms and Language Names

For hundreds of years, the empire ruled in the southern region of Ardusa. The Tavonic word *unner* /un'ner/ 'empire' evolved into the Alnuric word *alnur* /al'nur/. *Alnurek* /al.nu'rek/ 'Alnuric' takes its name from this word. Meanwhile, the Redodhic name for the empire is *nonar* /no'nar/, and its name for the Alnuric language is *Nonrik* /non'rik/. Similarly, the Alnuric and Redodhic names for the Alnuric people are *Alnureþ* /al.nu'reθ/ and *Nonriþ* /non'riθ/ respectively.

10.2.2 Ethnology

Here will be a brief ethnological description of the Alnureth.

10.2.3 Demography

Here will be a brief demographical description of the Alnureth.

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Alnuric Reference Grammar

Here is a reference grammar for Alnuric.

Part III

Tavonic Family: Redodhic

History and Ethnography

This chapter will present a brief history of the Redodhic language, followed by a short description of its ethnolinguistic context.

19.1 Brief History

Here will be a brief historical description of the Redodhith.

19.2 Ethnography

19.2.1 Demonyms and Language Names

In the north, the alliance resisted the empire's expansion. The Tavonic word *aroltutap* /a.rol.tu'taθ/ signifies 'alliance', however the alliance instead used the simpler form *arutap* /a.ru'taθ/ 'standers' to signify the alliance of those kingdoms standing against the empire. *Arutap* evolved into the Redodhic word *rejip* /re'dʒiθ/, and *Redoðik* /re.do'ðik/ 'Redodhic' takes its name from this word. The Alnuric name for the alliance is *eradep* /e.ra'deθ/, and its name for the Redodhic language is *Eratpek* /e.rat'θek/. Similarly, the Redodhic and Alnuric names for the Redodhic people are *Redoðip* /re.do'ðiθ/ and *Eratpep* /e.rat'θeθ/ respectively.

19.2.2 Ethnology

Here will be a brief ethnological description of the Redodhith.

19.2.3 Demography

Here will be a brief demographical description of the Redodhith.

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Redodhic Reference Grammar

Here is a reference grammar for Redodhic.

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Kalaakan Family: Kalaakan

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Kunmian Family: Kunmian

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Kunmian Family: Gnomish

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Gnomish Reference Grammar

Part X

Appendices

Example Texts

Here are some longer example translations.

Bibliography

- Annis, William S. “A Conlanger’s Thesaurus.” *Fiat Lingua*. September 1, 2014. Accessed September 8, 2018. <http://fiatlingua.org/2014/09/>.
- Baerman, Matthew, and Dunstan Brown. “Case Syncretism.” In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/28>.
- Becker, Carsten. “A Grammar of Ayeri: Documenting a Fictional Language.” Accessed November 25, 2018. <https://github.com/carbeck/ayerigrammar>.
- Bickel, Balthasar, and Johanna Nichols. “Exponence of Selected Inflectional Formatives.” In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/21>.
- . “Fusion of Selected Inflectional Formatives.” In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/20>.
- . “Inflectional Morphology.” In *Language Typology and Syntactic Description*, edited by Timothy Shopen. 2nd edition. Cambridge: Cambridge University Press, 2005.
- . “Inflectional Synthesis of the Verb.” In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/22>.
- Corbett, Greville G. “Number of Genders.” In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/30>.
- . “Sex-based and Non-sex-based Gender Systems.” In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <https://wals.info/chapter/31>.
- . “Systems of Gender Assignment.” In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <https://wals.info/chapter/32>.

- Daniel, Michael, and Edith Moravcsik. "The Associative Plural." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <https://wals.info/chapter/36>.
- Dryer, Matthew S. "Coding of Nominal Plurality." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <https://wals.info/chapter/33>.
- . "Position of Case Affixes." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <https://wals.info/chapter/51>.
- . "Prefixing vs. Suffixing in Inflectional Morphology." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/26>.
- Haspelmath, Martin. "Occurrence of Nominal Plurality." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <https://wals.info/chapter/34>.
- Iggesen, Oliver A. "Asymmetrical Case-Marking." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <https://wals.info/chapter/50>.
- . "Number of Cases." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <https://wals.info/chapter/49>.
- Maddieson, Ian. "Consonant Inventories." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/1>.
- . "Consonant-Vowel Ratio." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/3>.
- . "Syllable Structure." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/12>.
- . "Vowel Quality Inventories." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/2>.
- Nichols, Johanna, and Balthasar Bickel. "Locus of Marking: Whole-language Typology." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/25>.
- . "Possessive Classification." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. <http://wals.info/chapter/59>.

- Payne, Thomas E. *Describing Morphosyntax: A Guide for Field Linguists*. Cambridge, United Kingdom: Cambridge University Press, 2006. ISBN: 0-521-58805-7. <http://www.cambridge.org/vi/academic/subjects/languages-linguistics/grammar-and-syntax/describing-morphosyntax-guide-field-linguists>.
- Pearson, Matt. "The Okuna Reference Grammar." Accessed September 8, 2018. <http://pearson.conlang.org/>.
- Peterson, David J. *The Art of Language Invention: From Horse-Lords to Dark Elves, the Words Behind World-Building*. New York, New York, United States of America: Penguin Books, 2015. ISBN: 978-0-14-312646-1. <http://www.artoflanguageinvention.com/books/>.
- Plank, Frans. "Split Morphology: how Agglutination and Flexion Mix." *Linguistic Typology* 3 (1999): 279–340.
- Rosenfelder, Mark. *Advanced Language Construction*. Chicago, Illinois, United States of America: Yonagu Books, 2012. ISBN: 978-1478267539. <https://www.zompist.com/lck2.html>.
- . *The Conlanger's Lexipedia*. Chicago, Illinois, United States of America: Yonagu Books, 2013. ISBN: 1493733001. <https://www.zompist.com/lexipedia.html>.
- . *The Language Construction Kit*. Chicago, Illinois, United States of America: Yonagu Books, 2010. ISBN: 978-0-9844700-0-6. <https://www.zompist.com/lckbook.html>.
- Spencer, Andrew, and Ana Luís. "The Canonical Clitic." Chap. 6 in *Canonical Morphology and Syntax*, by Dunstan Brown, Marina Chumakina, and Greville G. Corbett, 123–150. 2012. ISBN: 9780199604326, accessed November 25, 2018. doi:10.1093/acprof:oso/9780199604326.001.0001. https://www.academia.edu/4379177/The_canonical_clitic_With_Ana_Lu%C3%ADs_.
- Zwicky, Arnold M. "Clitics and Particles." *Language* 61, no. 2 (1985): 286–290. Accessed November 25, 2018. <http://babel.ucsc.edu/~hank/mrg.readings/zwicky1985.pdf>.
- Zwicky, Arnold M., and Geoffrey K. Pullum. "Cliticization vs. Inflection: English N'T." *Language* 59, no. 3 (1983): 503–505. Accessed November 25, 2018. <https://web.stanford.edu/~zwicky/ZPCliticsInfl.pdf>.

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